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Our ref: GA/D10753

29 February 2024

Andrew Stone Architect,  
Little Gunville,  
Buckland Newton,  
Dorchester,  
Dorset.  
DT2 7DW

For the attention of Mr. A. Stone

Dear Andrew,

## **PROPOSED SCREEN AT ST. PHILIP & ST. JAMES CHURCH, WOODSTOCK ROAD, OXFORD**

We refer to your email dated 27 February 2024 in respect of the weight of the additional glass screen at the above.

The 21.5mm thick glass weighs approximately  $54\text{kg/m}^2$  which, from our estimation of the area of the glazing of  $12.6\text{m}^2$ , gives a total weight of 678kg or 6.65kN.

The horizontal force required to be applied to the handrail is 0.74kN/m.

The existing posts have a slenderness ratio in excess of 180 and will have a tendency to bend in the weaker axis, ie, the 36mm width, under vertical loading. This tendency to bend will apply a force to the edge of the glass, possibly causing it to crack.

Introducing a horizontal member to the posts at about mid-height will restrain them on the minor axis and, hence, reduce the slenderness ratio to an acceptable level.

We trust that this explanation is of assistance but should you have any queries, please do not hesitate to contact us.

Yours sincerely,



**Graham Aspley**  
**for and on behalf of**  
**ASPLEY ASSOCIATES LLP**